

AMENDMENTS TO THE CLAIMS:

Please amend the Claims as follows:

1 – 5. (Cancelled)

6. (Currently Amended) A production method for a purification catalyst for exhaust gas, wherein Pd and PdO are supported on an Al oxide and the Al oxide is (Ln: rare-earth metal) generated as a single phase and trigonal or rhombohedral, the method comprising:

preparing at least one kind of compound selected from a group of compounds of carboxylic acid having a hydroxyl group or a mercapto group and having a carbon number of 2 to 20, dicarboxylic acid having a carbon number of 2 or 3, and monocarboxylic acid having a carbon number of 1 to 20; and

adding at least one compound selected from the group to an aqueous nitrate solution including [[a]] Ln and Al component.

7. (Currently Amended) The production method for a purification catalyst for exhaust gas according to claim 6, the method comprising:

evaporating the aqueous carboxylic acid nitrate solution completely to produce a carboxylic acid complex polymer; and

heating the carboxylic acid complex polymer.

8. (Original) The production method for a purification catalyst for exhaust gas according to claim 7, wherein a heating temperature in the heating of the carboxylic acid complex polymer is not more than 1000°C.

9. (Cancelled)

10. (Cancel)

11. (Currently Amended) A purification catalyst for exhaust gas, ~~comprising an LnAlO_3 (Ln: rare earth metal) supporting Pd, according to claim 12~~, wherein the catalyst is produced by adding at least one kind of compound selected from the group of compounds of carboxylic acid having a hydroxyl group or a mercapto group and having a carbon number of 2 to 20, dicarboxylic acid having a carbon number of 2 or 3, and monocarboxylic acid having a carbon number of 1 to 20 to aqueous nitrate solution including a component Ln and Al.

12. (Currently Amended) ~~The A purification catalyst for exhaust gas according to claim 11, wherein the aluminum oxide comprising an Al oxide supporting Pd and aluminum oxide, where the AlO is (Ln: rare-earth) generated as a single phase and trigonal or rhombohedral.~~

13. (Currently Amended) The purification catalyst for exhaust gas according to claim [[12]] 11, wherein the catalyst is produced by evaporating the aqueous nitrate solution completely, to produce a carboxylic acid complex polymer and heating the carboxylic acid complex polymer.

14. (Currently Amended) The purification catalyst for exhaust gas according to claim [[12]] 13, wherein Pd is supported on LnAlO_3 in which Ln is a rare-earth metal, and an oxidation state of Pd in a surface supporting Pd is a state of Pd^{2+} .

15. (Currently Amended) A Purification catalyst equipment for exhaust gas, comprising the purification catalyst for exhaust gas according to claim [[10 or]] 11 or 12.

16. (New) The purification catalyst for exhaust gas according to claim 12, wherein the purification catalyst is a powder having a surface-to-weight ratio of 8 m^2 or more.

17. (New) The purification catalyst for exhaust gas according to claim 13, wherein the carboxylic acid is malic acid.